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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,086	10/24/2003	James P. Zucker	LEE 200330	8293

7590

09/28/2004

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1100 Superior Avenue  
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EXAMINER
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SHAW, CLIFFORD C

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/692,086

Applicant(s)

ZUCKER ET AL.

Examiner

Clifford C Shaw

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**Detailed Action**

1.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2.) Claims 1, 8-10, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese document no. JP58-107272A taken with Tunnell et al. (4,641,292). Figure 2 and the English language abstract of the Japanese document no. JP58-107272A disclose features claimed, including: a wire feeder at 11; remotely located power source 10; wire feeder input lead and power supply output lead associated with cable 13; welding control switches associated with element 17; transmitter 18 on the wire feeder to transmit signals to the power source via elements 19 and 20. The claims differ from the Japanese document no. JP58-107272A in calling for control signals for certain aspects of the welding system, namely, weld starting, voltage, current, and wire feed speed. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used the arrangement of the Japanese document no. JP58-107272A to control any conventional welding parameters known to be remotely controlled. In particular, it would have been obvious to have controlled the specific parameters set forth in the claims, the motivation being the teachings of Tunnell et al. (4,641,292) that it is advantageous to control these arc welding parameters by remote control (see figure 4 and the discussion at columns 8 and 9 in Tunnell et al. (4,641,292)).

3.) Claims 2-7, 11, 12, 15, and 16 are rejected under 35 U.S.C: 103(a) as being unpatentable over the Japanese document no. JP58-107272A taken with Tunnell et al. (4,641,292) as applied to claims 1, 8-10, 13, and 14 above, and further in view of the EPO document no. EP0575082A2. The only aspects of the claims to which the rejection above do not apply are the provisions for transmitting the control signals either by RF or by the welding cable. These differences do not patentably distinguish over the prior art. It would have been obvious to have transmitted the signals in the Japanese document no. JP58-107272A using any well known technique in lieu of the fiber optic system explicitly set forth. In particular, it would have been obvious to have used RF and more specifically, RF transmitted over the welding cable, the motivation being the teachings of the EPO document no. EP0575082A2 that such is advantageous for remote control of arc welding equipment, thereby satisfying the claims.

4.) The patents to Cox et al. (4,608,482) and Hsien (5,276,305) are cited to show prior art remote control arrangements for arc welders. In particular, note that the patent to Cox et al. teaches the use of either cable, radio transmitter, or infrared signals to transmit remote control signals at column 4, lines 23-25.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw  
Primary Examiner  
Art Unit 1725

September 25, 2004